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ABSTRACT

Previous management research supports the view that comprehensive planning and participative decision-making are important factors in reducing community opposition to educational policies. To investigate the possibility that neither of these strategies necessarily has this effect, a survey was undertaken of 53 school districts that had experienced declining enrollment over a 10-year period beginning in 1970-71. Following data collection by means of closed-ended questionnaires called checklists, a least-squares regression analysis was conducted of all variables, including community opposition, planning comprehensiveness, consultant involvement, teacher involvement, and community involvement. Results, as revealed in three statistical tables, indicate that, contrary to what might have been expected, comprehensive planning may actually increase rather than decrease opposition in conditions of decline where less systematic, shorter term planning might be more effective. Similarly, although increased participation generally leads to less opposition, in times of retrenchment only teacher involvement tends to decrease resistance. Under such conditions, the increased involvement of outside consultants and the community at large may have no impact on efforts to reduce opposition. (JBM)

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TWO PARADOXES IN MANAGING DECLINE:

COMPREHENSIVE PLANNING AND PARTICIPATION*

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ABSTRACT

This study reports the ten-year enrollment decline experience of 53 school districts to determine the effects of planning comprehensiveness and participation on community opposition to retrenchment decisions. Paradoxically, the data show that two widely-held management principles had either no effect on opposition or increased it.

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This paper won the "1982 Best Paper Award" in the Public Sector Division of the Academy of Management at its Annual Meeting in New York, August, 1982.

Major Products Emanating from
Organizational Responses to Decline
NIE Grant G-80-0170

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This paper is one of several products emanating from the research titled Organizational Responses to Decline. The complete list (to date) is as follows:

1. Berger, M. Two paradoxes in managing decline: Comprehensive planning and participation. In Kae H. Chung (ed.). The 1982 Academy of Management Proceedings. Loveland, Colorado: Lithographic Press, 1982, 334-338.

   This paper was also awarded the "1982 Best Paper in the Public Sector Division" of the Academy of Management at its 1982 Annual Meeting in New York, August, 1982.

2. Berger, M. Class size is not the issue. Paper presented at the National School Board Association Annual Meeting, Atlanta, April, 1982.

3. Berger, M. Organizational Responses to Decline: Summary Report. Submitted to the National Institute of Education, December, 1982.

4. Berger, M. Managing enrollment decline: Current knowledge and future applications. Peabody Journal of Education, 1983, (Forthcoming).*

5. Berger, M. Neighborhood schools: The new (?) legal response to enrollment decline and desegregation. Urban Education, 1983, (Forthcoming).**

6. Berger, M. Retrenchment policies and their organizational consequences. Peabody Journal of Education, 1983, (Forthcoming).*

7. Berger, M. Stages in decline: How educational organization scales down. Educational Administration Quarterly, 1983, (Under review).**

8. Berger, M. Studying enrollment decline (and other timely issues) via the case survey. Educational Evaluation and Policy Analysis, 1983, (Forthcoming).**

9. Berger, M. Why communities protest school closings. Education and Urban Society, 1983, (Forthcoming).**

10. Boone, C. The effects of succession on organizations in decline. Doctoral Dissertation, Peabody College of Vanderbilt University, Nashville, Tennessee, April, 1982.

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Two Paradoxes in Managing Decline

Michael A. Berger, Vanderbilt University

ABSTRACT

This study reports the ten year enrollment decline experience of 53 school districts to determine the effects of planning comprehensiveness and participation on community opposition to retrenchment decisions. Paradoxically, the data show that two widely-held management principles had either no effect on opposition or increased it.

INTRODUCTION

In an article written almost four decades ago, Herbert Simon (1946) observed that proverbs often come in mutually-contradictory pairs (e.g., "Absence makes the heart grow fonder" vs. "Out of sight, out of mind" or "Look before you leap" vs. "He who hesitates is lost"). Simon argued that the field of administration was overrun with principles (proverbs) and that conditions often exist which either contradict or seriously limit the application of a certain principle. While Simon examined the principles of unity of command and span of control to illustrate his argument, Robert Clark (1979) used the same reasoning to analyze program evaluation in a more recent article.

The purpose of this paper is to evaluate two of the most durable (and widely-accepted) principles of public management: rational planning and participation. The context of the analysis is public school districts which are experiencing enrollment decline. Decline is a dominant issue in public sector organizations and has been described for school systems using a pincers metaphor: if demographic changes are one arm of the pincers, the other arm is rising costs. Combine inflation with relatively less revenue (due to declining enrollment) coming into the district, and the pincers close (Cuban, 1979).

PROVERBS

The First Proverb: Rational Planning

The first management proverb is that comprehensive, deliberate planning techniques are preferred to less systematic short-term planning processes. Essentially, this means that districts experiencing enrollment decline should collect and analyze data and this effort, in turn, will produce organizational responses which will be acceptable to all parties. Technical rationality, in other words, will locate the "one best solution" for everyone concerned.

Support for this proverb comes not only from the scientific management principle "to plan ahead" but also from the enrollment decline literature which offers advice to school managers on how to adjust to decline (see Zerchykov, 1981 for a comprehensive review of this literature). For example, it has been argued that retrenchment planning needs to be based on reliable local data -- not only on enrollments but also on community needs and opinions, staff skills, facilities, programs, and grade organization (Bellon, 1977; Brown and Serville, 1979; Keough, 1978). Along the same lines, Bishop (1979) argues for a comprehensive facilities inventory using systematic standards and procedures, and cohort-survival methodologies for projection and non-demographic indicators, such as real estate information. Finally, Sargent and Handy (1974), Estes (1977), and Divoky (1979) contend that planning for retrenchment should be a year-around activity where all districts, no matter what their unique issues, require a comprehensive plan for shrinkage including: (1) goals and objectives, (2) a factual base, (3) an analysis of the data, (4) a set of solutions, (5) a choice among alternatives, and (6) a cost analysis of all plans.

While it is historically appropriate to argue that "comprehensive planning" will produce acceptable solutions, conditions of decline may require planning on a less comprehensive, more ad-hoc basis. Rational planning generates numbers, percentages, and ratios which tend to overwhelm and frustrate the less-technically inclined. Furthermore, many people believe statistics can be manipulated to show what one wants them to show. If this is true, the collection and presentation of elaborate information will increase rather than decrease opposition because of the belief that policymakers know what they want to do (in response to decline) and are simply constructing the numbers to justify their predetermined positions. Finally, in a decline situation, retrenchment decisions focus on who will be let go, what schools will be closed, and what programs will be sacrificed. In all public sector organizations, these decisions are rendered in the context of professional norms, government mandates, politically powerful constituents and collective bargaining agreements (Levine, 1979). If decisions for retrenchment are based on elaborate planning processes but exclude the importance of "political" realities, the response to the rational plan may be violent. One simply cannot tell a union it is more cost-effective to layoff older (more expensive) teachers before younger (less expensive) teachers.

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[1]This paper is based on a larger study supported by the National Institute of Education (NIE G80-0170). Any opinions, conclusions, or recommendations in the paper are those of the author and not necessarily the views of the Institute.

These arguments imply there may be a contradiction to the first management proverb. While comprehensive, deliberate planning techniques may produce less opposition in many situations, less comprehensive, swifter planning processes may reduce opposition in decline situations.

The Second Proverb: Participation

The second management proverb is that greater credibility and commitment, and less resistance to change occur when people are involved in decisions that affect them. This proverb suggests that board members and administrators should broaden participation in the retrenchment process. The appeal of this proverb is that it promises to reduce the inevitable tension between policy-makers and those who will be affected by policy decisions.

Numerous enrollment decline experts state the importance of participation in retrenchment decisions (Eisenberger, 1974; Keough, 1978; Sargent and Handy, 1974). Eisenberger, for example, is emphatic on the issue: "Technical planning and accurate data gathering are not enough. School officials need to let the community know they value their involvement, enlist the support of community opinion leaders, and establish district-wide, broadly representative task forces to engage community leaders in helping to plan for decline (1974, p. 34-37). Involvement, it should be noted, should not be limited to the community. Consultants, as well as teachers, should aid with the technical and political aspects of the situation (Behn, 1980; Divoky, 1979).

It is conceivable, on the other hand, that participation will not be a panacea. Levine (1979) identifies a participation paradox in decline situations: when the cutback process requires some people to take greater cuts than others, the participation process will encourage protective behavior from those likely to be hurt the most. Eisenberger (1974) warns that teachers are often more loyal to their school than to the district as a whole. Finally, consultant involvement may exacerbate tensions rather than relieve them, especially if the high-priced outsider is perceived as a pawn of the board.

This second proverb, therefore, may also need qualification. The participation of various constituents may be desirable in some situations; however, if carried to an extreme it could increase (rather than decrease) opposition to retrenchment decisions in decline situations.

Hypotheses

In summary, two general hypotheses guide this investigation:

H_o1: There will be no difference in community opposition between school districts which use comprehensive, deliberate planning techniques and districts which do not use such techniques.

H_o2: There will be no difference in community opposition between school districts which rely on extensive participation processes and districts which do not rely on such processes.

METHOD

Sample

A non-random sample of 53 school districts whose enrollment decline experiences were reported in case studies was used to test these hypotheses. Originally, 208 cases of decline were discovered. Since the cases varied considerably in quality, 70 cases were initially selected for the analysis. To control for differences between early and late decliners, 53 of the 70 cases (75.7%) whose peak enrollment year was on or before 1970-71, constitute the sample.

Data Collection

Data covering a ten-year period were collected for this study via the case survey method (see Berger, 1982). The procedure involves the analysis of cases with a closed-ended questionnaire, called a checklist. The checklist contains variables of interest to the researcher and can be aggregated to produce generalizations based on conventional statistical techniques. The method is particularly appropriate when a body of empirical evidence, such as the enrollment decline literature, has a large proportion of isolated, one-shot case studies.

After elaborate case search and checklist development, trained case analysts read the cases and filled out the checklists. A follow-up interview procedure supplied missing data from the original case study. To control for unreliable checklist application (when different case analysts fail to see or judge case events in the same way), 36 cases (68%) were reassigned to a second analyst to determine the degree of consistency between two independent raters on the same district. On a random sample of 50 items, the average Pearson's correlation coefficient for the two raters, corrected by the Spearman-Brown Prophecy Formula, was .78. Previous case survey analysts indicate a coefficient of .67 is adequate for case survey research (Jauch, 1980).

Model Specification and Measurement

To provide an empirical test of the two research hypotheses, a fully specified model was required. Three variable combinations led to the specification of three separate models.

$$\text{Model 1: } y = \alpha_1 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \varepsilon_1$$

$$\text{Model 2: } y = \alpha_2 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \varepsilon_2$$

$$\text{Model 3: } y = \alpha_3 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_9 + \varepsilon_3$$

where:
y: Community opposition - an index of opposition tactics used by the community to protest retrenchment decisions. High scores indicate the most

opposition (see Table 1).

X_1: Notification time frame - whether the community was notified of the decline problem less than two years before the first school closing or more than two years before such a closing.

X_2: Taskforce speed - the number of months from taskforce formation to final recommendations.

X_3: Planning comprehensiveness - an index of planning strategies used by the board to plan for retrenchment. Districts were given one point for each of the following techniques: collecting demographic data, plotting cohort survival, projecting enrollment statistically, analyzing migration patterns, calculating cost-benefit ratios, developing long-range personnel plans, reviewing bargaining policies, forming study groups, contacting other districts, and collecting facility data. The higher the score, the more comprehensive the planning.

X_4: Taskforce representativeness - whether or not the taskforce was made up of representatives throughout the district.

X_5: Consultant involvement - whether or not an outside consultant was involved in the retrenchment process.

X_6: Teacher involvement - the extent to which teachers were involved in helping the board make retrenchment decisions.

X_7: Community involvement - the extent to which the community was involved in helping the board to make retrenchment decisions.

X_8: Income - the average income in the district.

X_9: Community type - whether the district was urban, suburban, or rural.

TABLE 1. FACTOR ANALYSIS OF COMMUNITY OPPOSITION TACTICS (n = 53)

Items[a]	Loading
1. Letters to board members	.81
2. Petitions to the board	.76
3. Heated exchanges with board	.71
4. Personal attacks on board in media	.67
5. Demonstrations	.63
6. Board member replacement	.60
7. Lawsuits	.55
8. Voting down referenda or budgets	.49
Eigenvalue	3.51[b]
Variance explained	100%

[a] Items appear as they did on the checklist. The case survey question was worded as follows: "The case mentions the community used the following opposition tactics (answer beside each tactic: 1 = yes, was used; 2 = no, never happened; 9 = impossible to say)."

[b] It was hypothesized that these tactics form an underlying scale of increasing opposition to school board decisions. The principal factor analysis with iterations specified the number of factors at one. Thus, the underlying dimension hypothesis was confirmed. This confirmation, in turn, permitted the construction of an opposition value which was used as the criterion variable in the regression analysis.

Data Analysis

Ordinary least squares (OLS) regression was used to test the two general hypotheses. The technique is particularly appropriate because it provides tests of significance as well as the direction of the relationship between the dependent variable and each independent variable, the magnitude of change in the dependent variable as a result of each independent variable, and the overall explanatory power of each equation. Table 2 gives the means, standard deviations, and zero-order correlation coefficients. Table 3 presents the regression results.

RESULTS

Before the regression analysis, the zero-order correlation coefficients (Table 2) were examined to determine whether any redundant predictors were included. Correlation coefficients greater than .80 usually suggest that multicollinearity is present in the independent variables (Farrar and Glauber, 1967). The correlation matrix shows no coefficient equal to or above .80, and less than 17% (6 of 36) of the predictor coefficients significant at the .05 level or less. This low level of predictor correlation should eliminate any concern for multicollinearity.

The Planning Proverb

The planning proverb suggests that comprehensive, deliberate planning techniques produce less opposition to change than less comprehensive, less deliberate techniques. The results in Table 3 tend to reject this proverb. The data show that districts which spent more than two years between notification of a decline problem and school closings were likely to experience greater opposition than districts which moved more quickly. The relationship is significant at the .05 level in each model. Next, the data show that taskforce speed (from formation to recommendations) has no effect on opposition. Deliberate study, in other words, does not reduce (or increase) community opposition. Finally, the results indicate that planning comprehensiveness (Variable 3) has a strong, positive effect on opposition, that is, the more comprehensive the planning processes, the greater the community opposition.

This latter finding is attenuated somewhat in the third model (see Table 3) by the introduction of the urban variable. While planning comprehensiveness has a significant, positive effect (.01 level) on community opposition in the first two models, the inclusion of the urban variable reduces the standardized beta coefficient from .31 to .22. While the effect is still substantial and the di-

TABLE 2. DESCRIPTIVE STATISTICS AND CORRELATION COEFFICIENTS

VARIABLE	Mean	S.D.	1	2	3	4	5	6	7	8	9
1. Notification timeframe (1=<2 yrs, 2=>2 yrs.)	1.43	.50									
2. Taskforce speed (months)	9.02	4.20	-.06								
3. Planning Comprehensiveness (index range=3(low)to 10(high)	6.98	2.12	.10	.06							
4. Taskforce representativeness (1=yes, 2=no)	1.28	.45	.24	-.15	-.12						
5. Consultant involvement (1=yes, 2=no)	1.53	.50	.05	-.04	-.32*	.32*					
6. Teacher involvement (1=not at all, 5=extensive)	2.62	1.13	-.11	.04	-.01	-.32*	-.18				
7. Community involvement (1=not at all, 5=extensive)	2.96	1.00	-.29	-.20	.09	-.43**	-.20	.57***			
8. District Income (avg.) (1=<$14,999, 2=>$15,000)	.57	.50	-.04	-.06	-.25	.18	.13	.02	-.05		
9. Urban Community (1=yes, 0=no)	.36	.48	-.13	.20	-.01	-.01	.13	-.10	.03	-.48**	
10. Community Opposition (index range= 0 to 36)	14.63	11.98	.19	.06	.39**	-.08	-.02	-.36**	.07	-.04	.22

NOTE: n's range between 39 and 53

*Significant at .05 level (two-tailed test)
**Significant at .01 level (two-tailed test)
***Significant at .001 level (two-tailed test)

TABLE 3. RESULTS OF THE INFLUENCE OF PLANNING AND PARTICIPATION VARIABLES ON COMMUNITY OPPOSITION

MODEL	Planning Variables			Participation Variables				Control Variables		OVERALL SIGNIFICANCE			
	1.Notif Time	2.Taskf Speed	3.Plng Compr	4.Taskf Repre	5.Cnslt Invlv	6.Tcher Invlv	7.Cmty Invlv	8.Distr Incme	9.Cmty Type	R^2	df	F	p<
#1 Beta	.24	-.08	.28	-.15	-.16	-.46	.08			.37	7,30	2.55	.05
F	2.40*	.30	3.43**	.79	.96	6.54***	.20						
#2 Beta	.24	-.08	.31	-.17	-.16	-.47	.09	.10		.38	8,27	2.09	n.s.
F	2.30*	.26	3.50**	.90	.89	6.19***	.19	.42					
#3 Beta	.25	-.15	.22	-.16	-.21	-.42	.05		.41	.45	9,28	2.59	.05
F	2.62*	1.05	1.82	.92	1.90	5.74***	.07		3.60*				

*Significant at .05 level
**Significant at .01 level
***Significant at .001 level

rection is still positive, the third equation suggests that the impact of planning comprehensiveness on community opposition depends on whether or not the district is urban. In other words, when controlling for community type, planning comprehensiveness has an insignificant effect (at the .05 level) on community opposition. It is significant however, at the .10 level.

The Participation Proverb

The participation proverb asserts that extensive participation processes lead to less opposition. The most serious damage to the proverb is in the finding that there are no significant effects on community opposition from a representative taskforce, the use of consultants, or extensive involvement of the community. In other words, these three variables make no difference in reducing community opposition (see Table 3).

Support for the proverb, on the other hand, comes from the teacher involvement variable. The data show that the more the teachers are involved in retrenchment decisions, the less the community opposition. Moreover, the relationship remains statistically significant at the .001 level in all three equations.

In summary, Table 3 reveals that Models 1 and 3

explain 37 and 45 percent of the variance in community opposition, respectively, and are each significant at the .05 level. Three predictors were consistently significant: notification timeframe, planning comprehensiveness, and teacher involvement. Average district income had no effect on opposition and urban districts experience significantly more opposition than suburban or rural districts.

DISCUSSION

The interpretation of these results must be tempered by the possibility of a biased sample. The case survey method takes as its unit of analysis cases written about a district's particular enrollment decline experience. If the various cases are biased from the standpoint of author distortion, fact misrepresentation, or low external validity to other school districts, the biases from the original cases are transmitted to the present study.

This qualification notwithstanding, the analyses above suggest a revision of the planning and participation proverbs for school districts (and possibly for other public sector organizations) in decline. First, the data show that comprehensive planning may not be inversely related to community opposition, as expected. Although comprehensive planning may be functional for other purposes (i.e. to preserve the myth of rationality, to confound and confuse, or to provide the basis for more political, ad hoc decision making at a later time), the widely held belief that comprehensive planning processes reduce opposition to retrenchment decisions is not supported in this study.

Second, the data show that only teacher involvement has a mitigating effect on opposition. Other participation variables, contrary to expectations, have no impact on community opposition. In addition, although the consultant variable failed to reach statistical significance at the .05 level, its sign was consistently negative (indicating the presence of a consultant was associated with greater community opposition) and its beta weight in the third equation was significant at the .10 level.

Why do we observe these contradictions in these cherished management proverbs? One argument is that policymakers, when faced with the need to cutback, rely on management principles which were successful during earlier periods of growth: they take their time, they plan comprehensively, they form representative taskforces, they bring in outside experts, and they involve teachers and members of the community. However, processes which facilitate commitment (i.e., reduced opposition) in periods of growth may not apply in times of decline. Retrenchment policies inevitably require selective sacrifice: some schools must be closed while others remain open; some programs must be cut whereas others are preserved; and some staff must be terminated while others stay on. In growth, benefits are preserved or increased, whereas decline raises the delicate issue of who will bear the costs of the retrenchment. No amount of planning or participation can alter this reality.

CONCLUSION

In conclusion, the results of this study suggest that public sector management practitioners and scholars may want to modify their management proverbs when coping with decline. Each proverb has its counterpart:

> Proverb 1: Comprehensive, deliberate planning techniques are preferred in most situations. On the other hand, less systematic, shorter term planning may be most effective in reducing opposition in decline situations.
>
> Proverb 2: Generally, participation will lead to greater commitment and less resistance. On the other hand, the involvement of outside consultants and the community may increase opposition in decline situations.

In times of retrenchment, policymakers must anticipate that selective cutbacks will produce opposition. In this study, only the teacher involvement variable was associated with reduced community opposition. Other conventional principles, contrary to expectations, either had no effect on community opposition or actually increased it. Perhaps public sector managers will want to find new structures of participation for their professionals (in this case, teachers) to avert community protest and look more closely at their assumptions of what management principles work in times of growth versus times of retrenchment.

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